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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/657,803

09/08/2003

Masaaki Abe

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26021

7590

08/05/2004

HOGAN & HARTSON L.L.P.

500 S. GRAND AVENUE

SUITE 1900

LOS ANGELES, CA 90071-2611

EXAMINER

NGUYEN, MINH T

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/657,803

**Applicant(s)**

ABE, MASA AKI

**Examiner**

Minh Nguyen

**Art Unit**

2816



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 7-10, 12-14, 17-20, 22, 24, 26, 28 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 11, 16, 21, 23, 25, 27 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's response to the restriction/election requirement without traverse filed on 7/14/04 is acknowledged. The following is a detailed Office action of the elected species, i.e., claims 1, 6, 11, 16, 21, 23, 25, 27 and 29.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 6, 11, 16, 21, 23, 25, 27 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, the functional recitation on the last two lines does not have any element and/or structure to support. In other words, the claim does not have any element and structure to perform the recited function which is to adjust the analog value as recited.

As per claim 6, the recitation the cyclic signal changes for each frame is unclear.

Clarification is requested.

As per claim 21, the dependency status of the claim is ambiguous. If claim 21 is an independent claim, the format for writing independent claim causes confusion in determining fee payment, i.e., the evidence is that the USPTO is charging the dependent claim fee. If claim 21 is

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the dependent claim, the claim is rejected under 112 4th paragraph for failing to further limit claim 1 which is a fuse circuit.

As per claim 23, the same problem exists as discussed in claim 21.

As per claims 6, 11, 16, 21, 23, 25, 27 and 29, these claims are further rejected because of the indefiniteness of claim 1.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,677,917, issued to Wheelus et al.

As per claim 1, Wheelus discloses a fuse circuit (Fig. 1) for adjusting an analog value (this recitation is merely an intended use of the fuse circuit), comprising:

a latch circuit (26) which stores a setting state of a fuse element (the setting value of fuse element 21 is at the D input terminal of latch 26 and set by the fuse element 21, either blown or not, column 3, lines 40-43. The setting is cyclically latched and appeared at Q output terminal of latch 26 by the clock signal CLOCK); and

a latch clock generation circuit (Fig. 3, inverters 81 and 87) which generates a latch clock (ICLK) based on a cyclic signal (the clock signal CLOCK is clearly a cyclic signal), the latch clock being used for fetching the setting state of the fuse element into the latch circuit (Fig. 3, the

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data D from the fuse element is passed by the transmission gates 51 and 55 and 61 and the signal latch clock ICLK),

wherein the latch circuit cyclically fetches the setting state of the fuse element based on the latch clock (as shown, at each rising (trailing) edge of the clock, the state of the fuse element 21 is transferred to the output terminal Q of the latch 26), and

wherein the analog value is adjusted based on the setting state of the fuse element fetched by the latch circuit (because there is no element in the fuse circuit to support, the recited limitation is treated as an intended use of the information at the Q output terminal of the latch 26, and because the setting state of the fuse element fetched by the latch circuit is capable of being used for adjusting an analog value, for example, if Q is high, set the analog value to a first predetermined value, if Q is low, set the analog value to a second predetermined value, the recited limitation is met).

As per claim 6, insofar as understood, because the Wheelus' cyclic signal is a CLOCK signal, it changes for each frame.

As per claim 25, this claim is rejected for the same reason discussed in claim 1, last paragraph.

***Allowable Subject Matter***

4. Claims 11, 16, 23 and 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 11, 23 and 29 are allowable because the prior art of record fails to disclose or suggest the inclusion of a select signal generation circuit which generates the select signal based on a test mode setting signal and the latch clock in addition to the test signal holding circuit and the selector as recited in claim 11.

Claim 16 is allowable for the reason noted in claim 11.

5. Due to the serious indefiniteness of claims 21 and 27, discussed in section 2 herein above, patentability of these claims cannot be positively determined in this Office action. It appears the cited references of record do not teach the inclusion of a driver circuit to drive a display panel based on the value determined by the fuse circuit and based on the cyclic signal. However, it is unclear how the claims will be amended, the patentability of these claims will be determined in the next Office action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is **571-272-1748**. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



8/4/04

Minh Nguyen  
Primary Examiner  
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